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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,938	03/30/2004	Stefano Therisod	10030759-1	7493

7590 10/05/2005  
AGILENT TECHNOLOGIES, INC.  
Legal Department, DL429  
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EXAMINER

MOONEY, MICHAEL P

ART UNIT	PAPER NUMBER
2883	

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/813,938	<b>Applicant(s)</b> THERISOD, STEFANO	
	<b>Examiner</b> Michael P. Mooney	<b>Art Unit</b> 2883	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Togami et al. (6817782).**

Togami et al. teaches an optoelectronic module 300, comprising: a main body (e.g., fig. 3 nos. 316, 318); a flexible circuit (311A, 311B) conforming to the main body (e.g., fig. 3 nos. 316, 318).

Although Togami et al. does not explicitly state "including material having high thermal conductivity for dissipating heat" it would have been obvious to do so because Togami et al. does teach using metal (col. 4 lines 37-45) for shell 318 and, additionally,

Art Unit: 2883

it is conventional to provide a shell and related components with material having high thermal conductivity for dissipating heat.

One of ordinary skill would have been motivated to provide a shell/main body with material having high thermal conductivity for dissipating heat for the purpose of meeting the thermal constraints of the module/package.

Furthermore, Togami et al. teaches a wafer-level package (312 and/or 314) attached to the main body (e.g., 316, 318) and electrically coupled to the flexible circuit (311A, 311B), the wafer-level package including at least one optoelectronic device having an active region (inside 312 and/or 314); and an alignment element attached to the wafer-level package, the alignment element having features shaped to match with an optical fiber connector and align the active region of the optoelectronic device to an optical fiber (e.g., see the fig. 3 connecting arrangement).

Thus claim 1 is rejected.

It is noted that claim 1 can be made allowable by adding language which states that the flexible circuit conforms to the majority of the outer surface of the main body. The prior art does not teach the flexible circuit conforms to the majority of outer surface of the main body in combination with the rest of claim 1.

Togami et al. teaches a fiber receptacle attached to the main body for coupling with an optical fiber connector (e.g., fig. 3). Thus claim 2 is rejected.

Togami et al. teaches wherein the alignment element mates with a ferrule on the optical fiber connector (e.g., fig. 3). Thus claim 3 is rejected.

Art Unit: 2883

Togami et al. teaches an auxiliary component attached to the main body, the auxiliary component (e.g., the electronics of PCBA 316) coupled to the wafer-level package through the flexible circuit (e.g., fig. 3). Thus claim 4 is rejected.

Furthermore, although Togami et al. does not expressly mention a "cover" it would have been obvious to do so because another conventionally used auxiliary component is a cover attached to the main body (316, 318).

One of ordinary skill would have been motivated to provide a cover over the auxiliary component and attached to the main body for the purpose of meeting the thermal constraints of the module/package and/or providing protection to components.

Additionally, Togami et al. teaches a cover device 105 at fig. 1A.

Thus claim 5 is rejected.

Regarding claims 6 and 7, Togami et al. teaches the various connector configurations at, e.g., col. 5 lines 50-65. Thus claims 6 and 7 are rejected.

Regarding claim 8, Togami et al. teaches a TOSA and ROSA, the optical subassembly (OSA) devices are conventionally located in a sealed "can" or "TO-can" environment in order for the optical elements to perform properly. Therefore, although Togami et al. does not specifically mention a "gasket" and "lid", figure 3 among other figures shows a lid/"can" and using a gasket for sealing such a lid is conventional in the art. One of ordinary skill would have been motivated to use a gasket for the purpose of properly sealing the components. Thus claim 8 is rejected.

Furthermore, Although Togami et al. does not explicitly state a "window"/wafer it is conventional in OSAs/cans to provide either a window or a lens or both at the top of the can for optical transmission, the window being a wafer. One of ordinary skill would have been motivated to use a window/wafer or/and a lens for the purpose of providing the proper optical coupling characteristics. Thus claim 9 is rejected.

Regarding claims 10-20, each and every element of each of claims 10-20 is taught by the reasons and references given above and/or is rendered obvious by conventional principles in the art for OSA/TO-can devices. Thus claims 10-20 are rejected.

### ***Conclusion***

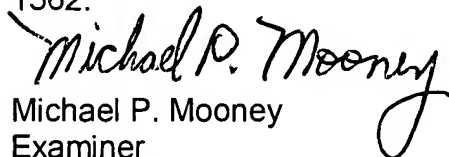
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Mooney whose telephone number is 571-272-2422. The examiner can normally be reached during weekdays, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on 571-272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2883

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-

1562.



Michael P. Mooney  
Examiner  
Art Unit 2883



Frank G. Font  
Supervisory Patent Examiner  
Art Unit 2883

FGF/mpm  
10/1/05